

# Crafting Clearer Student Learning Outcomes for Better-Aligned Courses and Programs

## The 2013 Assessment Institute in Indianapolis

Materials for Workshop Session 12K

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### Some key terms and concepts that *might* be of use

- Bus Test, Parrot Test, Parking Lot Test
- Cognitive load
- Metacognition
- The Dance Floor and The Balcony
- Formative and summative assessment
- Novice-Expert differences
- Deliberate practice
- The 80/20 Rule (aka, the Pareto Principle)
- Intended learning outcomes vs. Observed learning outcomes
- Backward design
- Threshold and core concepts
- Constructive alignment
- \_\_\_\_\_
- \_\_\_\_\_

## **CLEARER Student Learning Outcomes**

- **Constructively aligned**
  - **Learning focused**
  - **Evidence based**
  - **Assessable**
  - **Relevant**
  - **Equitable**
  - **Rigorous**
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## **Seven C's of Curriculum Design**

### **Proposed Design Criteria for Courses and Programs**

- **Compelling**
- **Constructively-aligned**
- **Conceptual**
- **Coherent**
- **Consequential**
- **Connected**
- **Cost effective**

## Clarifying Intended Learning Outcomes (ILOs)

### Examples to consider, critique, and perhaps improve from *Phrenology 101*

#### 1. On completion of this course, you should be able to:

- A. Demonstrate enhanced knowledge of the basic tenets of phrenology and its history
- B. Demonstrate understanding of what was current best practice of phrenology, as it was practiced in England of the 1840s
- C. Appreciate the relationship of phrenology to neuroscience

#### 2. When you have completed this course, you should be able to:

- A. List the six basic tenets of Gall's phrenological system
- B. Identify, locate, and explain the functions of at least 30 of the "organs" of the brain
- C. Explain the significance of organ size and shape
- D. Identify and summarize the key contributions of at least six major figures in the history of phrenology

#### 3. To successfully complete this course, you must demonstrate you can:

- A. Correctly locate and label all 35 organs on a map of the skull
- B. Phrenologize three subjects in one hour, summarize your analyses of all three in writing in the second hour, and achieve at least 85% agreement with expert analyses
- C. Prepare a character analysis and related career and marriage advice for a fourth subject, achieving at least 85% agreement with the expert responses
- D. Develop a 20-minute talk on your case study (C above), complete with visuals, for presentation at the ISP (Indianapolis Society of Phrenologists) and evaluation by the members.

[Presentation quality must be rated "Very Good" or "Excellent" by at least 80% of those ISP members in attendance].

## Developing Intended Learning Outcomes: An Example

### First-draft Intended Learning Outcome

Teachers in this course will design effective, research-based lessons.

### Second-draft ILO

Who?	Each teacher in this course
Will do what?	Will design a lesson to pre-assess, give feedback on, teach and post-assess students' understanding of an important and potentially problematic concept
For whom?	The elementary or secondary students in their placement classrooms
When?	Between semester weeks four and six
Where?	In her or his placement classroom
How?	Through an annotated lesson design, related assessments and assignments
How well? (to what standard?)	At the 'meets expectations' level or above on the assignment grading rubric as assessed by the course instructor—and by an expert school teacher
Why?	In order to demonstrate an appropriate level of skill in effective, research-based lesson design

### Third-draft ILO

Between semester weeks four and six, each teacher in this course will present an annotated lesson designed to pre-assess, give feedback, teach, and post-assess their placement students' understanding of an important and problematic concept, in order to demonstrate an appropriate level of skill in effective, research-based lesson design.

**Standard:** The quality of the annotated lesson and related materials must be assessed at the 'meets expectations' level or above, overall, on the assignment grading rubric by both the course instructor and by the external assessor (an expert school teacher trained in the use of this rubric).

### Fourth-draft ILO

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# Sharpening Up Learning Outcome Statements

Draft Learning Outcome (Write this only after you've answered the questions below):

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**Who?** \_\_\_\_\_

**Does/Will Do What?** \_\_\_\_\_  
\_\_\_\_\_

**To/For Whom?** \_\_\_\_\_

**By When?** \_\_\_\_\_

**Where?** \_\_\_\_\_

**How?** \_\_\_\_\_  
\_\_\_\_\_

**How Well?** \_\_\_\_\_

**Why?** \_\_\_\_\_  
\_\_\_\_\_

## Macroeconomics Essay Grading Grid

**Assignment:** Write a well-structured, enlightened critical essay about current economic conditions that demonstrates command of existing economic knowledge, appropriate interpretation and application of that knowledge, and demonstrates appropriate use of data and argumentation to support well-reasoned policy recommendations.

**Basic Questions:**           What is the current macroeconomic situation in the U.S.?  
   What is the likely prognosis for the next 12 to 24 months?  
   What are your economic policy recommendations?

Criterion	Distinguished	Exceeds Expectations	Meets all Expectations	Meets some Expectations	Unsatisfactory	Missing or fails minimum req.
<b>Structure</b>	<b>10</b>	<b>8</b>	<b>6</b>	<b>4</b>	<b>2</b>	<b>0</b>
Meets all minimum requirements						
<b>Executive summary</b> is effective & concise						
<b>Introduction</b> clearly lays out a roadmap for the paper and places the information in context						
<b>Body</b> addresses all the Basic Questions, includes the argumentation and data						
<b>Conclusion</b> provides summary and closure						
<b>Content</b>						
<b>Knowledge</b>	<b>30</b>	<b>24</b>	<b>18</b>	<b>12</b>	<b>6</b>	<b>0</b>
<b>Command</b> of existing economic knowledge						
<b>Use of terms</b> , theories, and data are						
<b>Informed judgment</b> demonstrated by selection of terms, theories and data (shown by the exclusion irrelevant and inclusion of						
<b>Argumentation</b>	<b>40</b>	<b>32</b>	<b>24</b>	<b>16</b>	<b>8</b>	<b>0</b>
<b>Argument flows logically</b> so that early statements lay the foundation for later statements and the reader is guided through the arguments						
<b>Appropriate application</b> of theory is used to make argument; clearly links theory and data to conclusions						
<b>Arguments are persuasive</b> focuses on key points, does not wonder, uses no unnecessary verbiage						
<b>Alternative</b> policies, arguments, conclusions and generalizations are noted where they exist and addressed; differences of opinion, supported by evidence, are also discussed						
<b>Data used</b> is reliable, valid, and pertinent; it provides effective support; no superficial information or tangential data muddies the argument						
<b>Striving for Excellence and Creativity</b>	<b>20</b>	<b>16</b>	<b>12</b>	<b>8</b>	<b>4</b>	<b>0</b>
<b>Presentation</b> is neat and professional; all visuals used are well labeled, clear, and effective conveying information better than words; text contains no errors and is easy to read & understand						
<b>Creativity</b> – the paper clearly holds the imprint of the author. Original thought is demonstrated by innovative organization, the integration of concepts and ideas, the use of new approaches, the novel use of visuals, or						

Thanks to Dr. Richard Stratton of the University of Akron for permission to use this example.

# Sharpening Up Learning Outcome Statements

Draft Learning Outcome (Write this only after you've answered the questions below):

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**Who?** \_\_\_\_\_

**Does/Will Do What?** \_\_\_\_\_  
\_\_\_\_\_

**To/For Whom?** \_\_\_\_\_

**By When?** \_\_\_\_\_

**Where?** \_\_\_\_\_

**How?** \_\_\_\_\_  
\_\_\_\_\_

**How Well?** \_\_\_\_\_

**Why?** \_\_\_\_\_  
\_\_\_\_\_

# “Backward” Course Design – A Simple Planning Model

Align with Institutional and/or Program Intended Learning Outcomes	Develop Course-Level Intended Learning Outcomes	Develop Standards for Assessing and Grading Performance	Develop the Summative Assessments	Develop Diagnostic and Formative Assessments	Develop Learning Activities and Assignments

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## YOUR NOTES



## ***Applications Card***

***Interesting  
IDEAS/TECHNIQUES  
from this session***

***Some possible  
APPLICATIONS of those  
ideas/techniques to my work***

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## ***A FEW USEFUL REFERENCES ON ASSESSMENT, CURRICULUM DESIGN, AND ON IMPROVING TEACHING AND LEARNING QUALITY***

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